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10/049,623	02/22/2002	Yoichiro Tanaka	219861USOPCT	7766

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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

FITZGERALD, MARC C

ART UNIT	PAPER NUMBER
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1615

DATE MAILED: 06/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/049,623	Applicant(s) TANAKA ET AL.	
	Examiner Marc C. Fitzgerald	Art Unit 1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8,9 and 23-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8,9, 23-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Application

The Examiner thanks the Applicants for their timely received Request for Continued Examination received on 7 March 2006 in the matter of 10/049,623. As of receipt of the RCE claims 1-7 and 10-22 have been cancelled and claim 8 amended. Claims 8, 9, and 23-36 are pending.

Claim Rejections - 35 U.S.C. § 112, 2nd Paragraph

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 23, 29-32, and 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 23, 29-32, and 36 contain the term freeze-shattering. Although the term is recited on pages 3-5 of the text the specification does not provide a basis for which one of ordinary skill in the art could make a reasonable interpretation of the meaning. The examiner has interpreted the term in light of the Method of Preparation in working example 1 (page 16) which says the composition was cooled using liquid nitrogen to obtain an aqueous gel powder. Please clarify what is meant by the term.

Claim Rejections - 35 U.S.C. § 103(a)

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 8 and 23-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over JA Patent No. 04-001118 to Toshihiro Tanaka ('118).

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 8 and 23-32 are rejected under 35 U.S.C § 103(a) as being unpatentable over '118. Tanaka describes a cosmetic characterized by a pressure-collapsible flexible resin capsule comprising a water and/or moisture-retaining powder. On page 8, the last paragraph of '118, a pressure-collapsible flexible resin capsule comprising water and a moisture-retaining ingredient is taught wherein the moisture-retaining ingredient is selected from a list of ingredients comprising xanthan gum and carrageenan which are included in the list of water-soluble gallants of the instant application. Tanaka also teaches that the ingredient is not limited to those described in the patent and is only required to be soluble to water, alcohol, or polyhydric alcohol and to exhibit skin moisturizing properties.

The 2nd and 3rd paragraphs on page 9 of '118 further teach that the composition comprises a shell-forming resin comprised of an inorganic fine powder selected from a list of ingredients that include ultrafine particulates of anhydrous silica wherein the grain diameter of the powder is $\frac{1}{2}$ or less of the capsule size, preferably about 0.01-2 μm ingredient. This disclosure reads on the required hydrophobic particles used to coat the gel core.

Absent from the cosmetic preparation taught by Tanaka is the freeze-shattering limitation as claimed in claims 23 and 29-32. However, there is no showing by way of working examples or criticality that this limitation demarks a patentable distinction over what has already been patented in the art. Thus one of ordinary skill in the art would have been motivated to use the capsules taught by Keshouryou because they are rupturable and the components are released upon pressure, furthermore, they appear to

Art Unit: 1615

offer the same benefits in terms of ease of use, smooth feel, skin sensation, and moisturizing as those described in the instant application.

The Tanaka reference clearly reads on a cosmetic preparation comprising hydrophobic particle materials; however, it does not speak to the actual particle sizes as claimed in claims 24, 27, 30, and 33. Absent any evidence to the contrary, these materials are deemed to have appropriate size diameters. Hence the Tanaka reference makes obvious the instant claims.

Claims 9 and 29-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over JA Patent No. 59-046125 to Kimijima, et al. ('125)

Kimijima describes a microcapsule characterized by freezing, grinding, and powdering a core substance which comprises a liquid and powdery form that may be used to encapsulate cosmetics. See page 3, 2nd line wherein fragrances are taught. The patent explicitly teaches that the core substance is frozen using the coolness of liquid nitrogen at temperatures between -30 to -80 °C. See page 5, first full paragraph and working examples 3 and 4. The patent teaches that the microencapsulation is covered with a hydrophilic fine powder such as a gelatin which is further covered with hydrophobic polymer. See page 7 bridging page 8. Working example specifically teaches the use of silica as the gelling agent.

The patent differs from the instant application in that it does not disclose the entire gelling genus as claimed in the instant application. However, all the other required limitations of claims 35 and 36 are met. One of ordinary skill in the art would have been

Art Unit: 1615

motivated to select any gallant or gell-forming agent including those of the instant genus with an expectation of success that any gelling agent known to be useful in the cosmetic would render similar results. Furthermore, there is no showing the particular genus has any patentable novelty over would is already available in the prior art.

Rejection(s) of Record

Claim Rejections - 35 U.S.C. § 103(a) issued on 4/08/05

Claims 1-3, 5-8, 10-12, 14, 15, 17, 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reyes (US Pat. No. 3,405,071) in view of Deubzer ef al. (US Pat. No. 6451,313 B1) to Reyes.

Reyes teaches microcapsules and a process of making microcapsules comprising havingan outer hydrophobic polymer layer grafted onto a gelled hydrophilic polymer containing an encapsulated polar solution (see reference col. 1, lines 10-42)) (col. 2, line 3-35) and Examples.

The hydrophilic polymer, in the internal phase, is gelled to form a microscopic particle or core containing the aqueous solution to be encapsulated. Suitable gellable hydrophils include, for exnmple, agar agar, alginic acid and derivatives, casein, starch, locust bean gum, polyvinyl alcohol and other gellable colloids. Where alkali solutions are being encapsulated, hydrophilic colloids such as natural gum, starch and the like may be in the formulation to increase the initial water holding capacity (col. 4, lines 24-33). Reyes describes suitable hydrophobic polymers, for example, vinyl,

Art Unit: 1615

acrylate, styrene, polyethylene, polypropylene polymers, natural and synthetic rubbers, qellophane and cellulose derivatives. The polymeric materials should exhibit stability (col. 3, lines 20-42); (col. 4, lines 12-23).

According to Reyes, to produce microcapsules which are water-resistant or water-vapor impermeable, it is essential that the grated monomer or polymer forming the outer surface of the microcapsule product be a hydrophobic material (col. 4, lines 1-5). As a particular example of the process, Figure 1 demonstrates an emulsion formed in step 10 comprising a solution of gellable hydrophilic polymer and aqueous solution as the internal phase and an immiscible organic or nonpolar solvent containing a hydrophobic polymer-forming monomer and a hydrophobic polymer as the external phase (col. 4, lines 6-12). Likewise, Figure 2 demonstrates a technique utilizing hydrophilic materials that comprise microscopic particles of casein, agar agar, alginic acid derivatives such as sodium alginate, starch, locust bean gum, polyvinyl alcohol and like gellable colloids (col. 4, line 66 - col. 5, line 6). Example 1 at column 5 demonstrates a water-in-oil emulsion incorporating polybutene. After thoroughly mixing under nitrogen, casein and triethanolamine were added to result in casein particles containing appreciable amounts of polybutene.

Reyes do not explicitly teach the instant particle diameters. However, in the absence of showing the criticality of the instant particle diameter, it is the position of the Examiner that it is deemed obvious to one of ordinary skill in the art to determine suitable particle diameters through routine or manipulative experimentation to obtain optimal results, as these are indeed variable parameters attainable within the art. The

Art Unit: 1615

prior art clearly recognizes and teaches microcapsules wherein hydrophilic polymeric materials are coated with hydrophobic particles.

Regarding the 'freeze-shattering' of the gel, no criticality is seen in the use of Applicant's freeze-shattering of the gel since the prior art teaches obtaining a similar capsule that releases the components upon pressure. Moreover, Reyes teaches capsule formulating techniques involving the use of nitrogen (see Example 1).

Reyes teaches microcapsules formed of an outer hydrophobic polymer layer grafted onto a gelled hydrophilic polymer containing an encapsulated polar solution.

Reyes teach that the coated microcapsules are used in the paper industry whereby depending on the materials to be encapsulated, markings are made by application of pressure (col. 2, line 27-62). Reyes do not teach that the microcapsule is used for cosmetic applications.

Deubzer et al. ('313) teach a process for the preparation of microencapsulated products, such as microcapsules having shell walls of organopolysiloxane surrounding a solid or liquid core material, wherein the microcapsules are used for various applications including cosmetics, care products, coatings and paper and construction industries (see reference col. 6, lines 15-25) and Abstract. Materials to be encapsulated include water and water-soluble materials such as gelatin, agar, pectins, celluloses and the like (col. 3, lines 47-54); (col. 5, lines 57-60). The microcapsules are used in cosmetics and are comprised of a particle-powder such that when pressure is applied, oily contents are released (col. 6, lines 21-46).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the coated microcapsules of Deubzer et al. within the microcapsules of Reyes, because Deubzer et al. explicitly teach a coated microcapsule formulation that encapsulates solid/liquid materials that is advantageously used for multiple applications, including cosmetic applications, as well as paper and construction industries. The expected result would be an improved, coated microencapsulated product that is conveniently employed in an array of applications for versatility of use and ease for the consumer.

Claims 9, 13, 16, 18, 20 and 22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Reyes (US Pat. No. 3,405,071) in view of Deubzer et al. (US Pat. No. 6,251,313 B1) as applied to claims 1-3, 5-8, 10-12, 14, 15, 17, 19 and 21 above and further in view of Munteanu et al. (US Pat. No. 4,428,869). The teachings of Reyes (d071) and Deubzer et al. (:313) are delineated above. While Reyes and Deubzer both

Art Unit: 1615

recognize oil-containing pressure-rupturable microcapsules (see Reyes, col. 1, lines 39-42 and Deubzer col. 6, lines 15-46), the references do not teach a method of applying makeup comprising applying the cosmetic to the skin and applying pressure to cause release of fluid.

Munteanu et al. ('869) is relied upon for the teaching of a microencapsulated fragrance composition (i.e., cologne, after-shave, bath lotions) that is releasable either hydrolytically (as a result of contact with excreted sweat) or by means of application of mechanical pressure (as a result of rubbing or washing and/or normal contact between skin and clothing).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the cosmetic application techniques of Munteanu et al. because they teach that the microencapsulated fragrance compositions can be easily applied and released onto the skin, by placing pressure on the microcapsule. The expected result would be an improved cosmetic microcapsule formulation that offers enhanced techniques for application of makeup.

Response to Arguments Rec'd on 06/08/04

Applicant's arguments filed 06/08/04 with respect to claims 1-3 and 5-22 have been considered but are moot in view of the new grounds) of rejection.

Claims 1-3 and 5-22 have now been rejected over the references of Reyes (US '071), Deubzer et al. (US '313) and Munteanu et al. (US '869). The prior art teaches and suggests coated microcapsule formulations comprising core hydrophilic polymeric

Art Unit: 1615

materials coated with outer hydrophobic materials. Hydrophilic materials taught include gelatin, agar agar, pectins and gums. The prior art also recognizes fluid-containing capsules that release their components upon the application of pressure. The capsules can be used in various industries, including cosmetics. The prior art teaches the incorporation of the same ingredients, used in the same field of endeavor for a similar purpose as that desired by Applicants. Hence, in view of the prior art teachings and suggestions, the instant invention is rendered prima facie obvious to one of ordinary skill in the art.

Response to Amendment Rec'd 4/8/05

The amendments filed 8 July 2005 are acknowledged. Claims 1-7 and 10-22 have been cancelled; claims 8 and 9 have been amended; and newly added claims 23-36 have been entered. Claims 8, 9, 23-36 are pending in the matter of U.S. Application No. 10/049,623.

Claim Rejections - 35 U.S.C. § 103(a) Issued 10/19/05

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1615

Claims 23-28, 35, and 36 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 3,405,071 to Reyes in view of U.S. Patent 6,251,313 B1 to Deubzer et al.

For reasons set forth in the office action mailed 8 April 2005, the 103 rejection to claims 23-28, 35, and 36 is repeated. The substance of the rejection is provided in the Response to Arguments.

Response to Remarks/Arguments Rec'd 1/19/06

To the extent of which the rejection to claims 1-7 apply, the 103 rejection to claims 9, 29-34 is withdrawn. Claims 9, 29-34 are in condition for allowance.

To the extent of which the rejection to claims 10-22 apply, the 103 rejection to claims 8, 23-28, 34, and 35 is repeated.

The Applicant's arguments have been fully considered but they are not persuasive. The Applicant's argument are summarized as the following:

1. Reyes does not describe a cosmetic.
2. The rejection is untenable because the combination of prior art provides no description or suggestion to make the modifications suggested by the Office.
3. Reyes would not have been modified or combined with Deubzer because each microcapsule specifically relates to the discovery of an optimized microparticle to deliver a material.

4. One would have been dissuaded from using the Reyes microcapsules in place of the Deubzer microcapsules because they are not suitable for cosmetic application.

In response to applicant's argument that Reyes is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the product and process as claimed in Reyes describe a rupturable microcapsule comprising an outer hydrophobic polymer layer grafted onto a gelled hydrophilic polymer containing an encapsulated polar solution. The instant application describes a similar product for use as a cosmetic preparation comprising a water-containing powder composition with aqueous gel cores made from a water-soluble gellant coated with hydrophobic particles.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the term cosmetic preparation is a generic term. And although the product in Reyes has a

Art Unit: 1615

different utility, the product and the essential components are the same in the instant and prior art inventions. Thus the application of Reyes to the instant invention as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art of microencapsulation.

In response to applicant's argument that Reyes would not have been modified or combined with Deubzer because each microcapsule specifically relates to the discovery of an optimized microparticle to deliver a material, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

In response to applicant's argument that one would have been dissuaded from using the Reyes microcapsules in place of the Deubzer microcapsules because they are not suitable for cosmetic application, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Conclusion

The amendments to claim 8 do not place the application in condition for allowing the composition claims. The 103 Rejection issued on 10/19/05 is maintained. A 112, 2nd

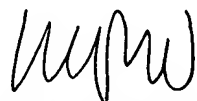
Art Unit: 1615

Paragraph Rejection and an additional 103 Rejection form a new grounds of rejection in this Office action. Please note the withdrawal of allowability of claims 9 and 29-34 as the English translations of Kimijima provide sufficient reason to reject the claims. The translation of the Japanese patents used to form the basis of the new 103 Rejection are provided with this Office action.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc C. Fitzgerald whose telephone number is (571) 272-8510. The examiner can normally be reached on 8:30 AM - 5:00 PM (EST). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael P. Woodward can be reached on (571) 272-8373. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


MICHAEL P. WOODWARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600